

REMARKS

The Invention

The present invention relates to a network protector and, more specifically, to a network protector having an arc path structured to direct arc gasses away from the network protector electrical components. The network protector consists of a circuit breaker and additional electrical components such as a control relay. The network protector circuit breaker typically has three sets of separable contacts and an arc chute for each set of separable contacts. The invention provides an arc path assembly having a hollow member with at least one open end that is in fluid communication with each arc chute and which extends from the circuit breaker to a point beyond the network protector frame assembly. The hollow member directs arc gasses out of the arc chutes and away from the other electrical components. As such, the other electrical components may be mounted immediately adjacent to the circuit breaker.

The hollow member is, preferably, made from a non-conductive material. As such, any residual energy that is not extinguished in the arc chute will dissipate in the arc path assembly. Additionally, the hollow member is, preferably, an elongated member having a longitudinal axis that is generally perpendicular to the axis of each arc chute. As such, the flow path through which the arc gasses travel turns about ninety degrees. This turn in the flow path allows the arc gas particulate matter to collect on the non-conductive hollow member, thereby reducing the chance that deposits of arc gas particulate matter will create a flow path for electricity between the arc chute and other areas of the network protector.

Status of the Claims

Claims 1-20 are pending in the application.

Claims 1-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kuhn et al.* (U.S. Patent No. 4,017,698) in view of *Young* (U.S. Patent No. 5,414,584).

Claims 1-20; Rejected Under 35 U.S.C. § 103(a)

Claims 1-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kuhn et al.* (U.S. Patent No. 4,017,698) in view of *Young* (U.S. Patent No. 5,414,584). *Kuhn* discloses a draw-out circuit interrupter having an interrupter module, control module, mechanism module, and other components coupled to a moving frame assembly. The frame assembly is structured to

move in and out of an enclosure having a removable door. The interrupter module includes pairs of separable contacts wherein each pair of contacts has an arc chute. Although not specifically stated, the arc chute apparently exhausts the arc gasses into the enclosure. *See* Figs. 1A and 3. It is further noted that the *Kuhn* enclosure is a water-tight enclosure when the door is in place. *See* Col. 4, lines 15-24.

Young discloses a molded case circuit breaker disposed in an enclosure having a plurality of vents. The vents are simple, elongated openings in the housing sidewall. Within the *Young* enclosure is a gas chute structured to direct arc gasses away from the molded case circuit breaker towards the vents. The gas chute is a U-shaped member that forms a generally closed passage when coupled to the enclosure. A flame arrestor and screen are disposed in the gas chute to protect the vents from damage from the arc gasses. The stated purpose of the *Young* device is to exhaust the circuit breaker enclosure. Col. 2, lines 6-14.

In *KSR International Co. v. Teleflex Inc.*, ___ U.S. ___, ___, 2007 WL 1237837 (2007), the Supreme Court stated the following with respect to the determination of obviousness under 35 U.S.C. § 103:

[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, *it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does*. This is so because inventions in most, if not all, instances rely on building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

Id., at 14 (emphasis added).

In addition, the Supreme Court further noted that:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, *all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue*. To facilitate review, this analysis should be made explicit. *See In re Kahn*, 441 F.3d 977, 988 (Fed Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinnings to support the legal conclusion of obviousness”).

Id., at ____ (emphasis added).

It is further noted that, *In re Fine*, 837 F.2d 1071 held that, although some of the cited references, individually, may have some of the claimed inventions' features, "one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention." *Id.* at 1075. Instead, to reach the proper conclusion under §103:

the decision maker must step backward in time and into the shoes worn by [a person having ordinary skill in the art] when the invention was unknown and just before it was made. In light of *all* the evidence, the decision maker must then determine whether...the claimed invention as a whole would have been obvious at *that* time to *that* person.

Id. at 1073-74.

Applicants believe that the Examiner has not properly supported the rejection of claims 1-20 rejected under 35 U.S.C. § 103(a) and under *KSR International*. The *Kuhn* reference is directed to a network protector disposed in a water-tight enclosure. The *Young* reference discloses a housing for a circuit breaker having a plurality of vent slots. It is noted that within the *Young* enclosure there are no valves, regulators, or other such devices structured to allow fluid to flow in a single direction. The *Young* vent slots are simply openings. It is axiomatic that a "water-tight enclosure" cannot incorporate a plurality of simple openings. As such, these references are not combinable in the manner suggested by the Examiner. Further, as the established function of the *Kuhn* reference is to provide a water-tight enclosure and the established function of the *Young* reference is to exhaust the circuit breaker enclosure, these references are not combinable under *KSR International*.

Further, the rationale for combining these references is set forth in a single sentence reading, "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Kuhn et al.* with *Young*, by incorporating the arc path assembly of *Young* into the device of *Kuhn et al.* for the purpose of containing the molten metal particles and flames caused by an arc while at the same time allowing gas pressure to be relieved." Office Action at 3. First, a single sentence is not an "articulated reasoning with some rational underpinnings" sufficient to establish a *prima facie* case of obviousness. Moreover, the Examiner has merely identified two specific components, a network protector and an exhaust passage, from separate references and stated that these elements could be combined. The

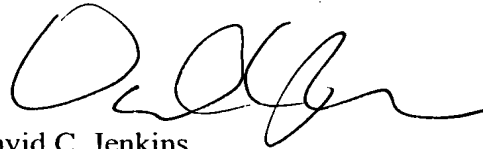
Examiner has not presented an “articulated reasoning with some rational underpinnings” addressing how one skilled in the art would, for example, maintain the water-tight enclosure of *Kuhn* while incorporating the opening through the enclosure disclosed in *Young*. As such, the Examiner appears to be erroneously using hindsight to pick and choose, among isolated disclosures in the prior art, the elements of the invention as recited in the claims of the present application.

Accordingly, as the Examiner has noted that neither reference discloses all of the elements recited in the claims of the present application, and, as these references cannot be combined in the manner suggested by the Examiner, the rejection of Claims 1-20 under 35 U.S.C. § 103(a) as being unpatentable over *Kuhn* in view of *Young* is in error and should be withdrawn.

CONCLUSION

In view of the remarks above, Applicants respectfully submit that the application is in proper form for issuance of a Notice of Allowance and such action is requested at an early date.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. Jenkins', with a large, stylized initial 'D' and a long, sweeping horizontal stroke at the end.

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